

## ABSTRACT

An injection nozzle 21 for injecting a combustible gas into an annular combustion chamber 10 formed above a driving cylinder 4 is formed so as to face the interior of the combustion chamber 10, in which a rotary fan 24 for mixing a combustion gas supplied into the combustion chamber 10 and air is provided.

A vortex generator 33 is formed in an upstream side of the injection nozzle 21 in an air flow formed in the combustion chamber 10 by the rotary fan. Vortexes are generated near the injection nozzle 21 in the combustion chamber 10 by the vortex generator 33, so that the mixing of the combustion gas and air is promoted.